

REMARKS

Claims 1 and 6-16 are pending in the current application. Of those, Claim 1 is an independent claim. Claims 1, 7, 12, and 15-16 are amended by this Response. Claims 2-5 are canceled. No new claims are added by this Response.

Discussion of Example Embodiments

Nagai discloses at paragraph [0071] that “it has become evident that the compound of formula (1) captures polyvalent metal ions caused by contamination during ink production or recording system operation, or includes the hydrophobic groups of the coloring material, in the case of high pH, thereby the storage properties can be improved.” However, example embodiments described in Applicant’s specification at paragraph [0033] disclose “the interaction among the hydrophilic blocks can be enhanced by a bridging effect yielded by the action of calcium ions or magnesium ions having bivalent positive charges to ether groups forming the hydrophilic block having negative charges; this enhanced interaction may lead to the stabilization of the outside-configuration formed with the hydrophilic blocks at the surface of an encapsulated particles of the colorant.” Accordingly, it is clear that the compound of the formula (1) in Nagai acts to absorb metal ions, however, in Applicant’s example embodiments, metal ions may act to protect the surfaces of an encapsulated colorant and to maintain the surfaces in uniform density of charge.

Claim Rejections – 35 U.S.C. § 103

Claims 1-4 and 6-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. (US 2002/0180854, hereinafter Sato) in view of Nagai et al. (US 2002/0135650, hereinafter Nagai).

The Examiner already admits at page 5 of the current Office Action that Sato fails to disclose a calcium compound and a magnesium compound. Instead, the Examiner relies on Nagai as disclosing the use of a calcium compound or magnesium compound. However, Nagai at paragraph [0081] requires the combined use of the compound represented by formula (1) with the metal salt such as calcium or magnesium salt to bring about the advantageous effects recited in paragraph [0081] of Nagai. The ink composition of Applicant's claim 1 does not contain the compound represented by formula (1) in Nagai. And, if Sato is combined with Nagai without the compound represented by formula (1) in Nagai, the advantageous effects recited at paragraph [0081] of Nagai cannot be brought about.

Even assuming for the sake of argument that the recording liquid of Nagai brings about similar advantageous effects as the inkjet recording ink of Applicant's example embodiments (which Applicant does not admit), the recording liquid is completely different from the ink composition of Applicant's claim 1 not only in composition but also in the mechanism that brings about the advantageous effects.

Accordingly, Applicant respectfully submits that even assuming for the sake of argument Sato and Nagai are properly combinable (which Applicant does not admit), claim 1 is not rendered obvious by a combination of Sato and Nagai. To the contrary, both Sato and Nagai fail to disclose, teach, or suggest, either alone or in combination, "An inkjet recording ink comprising a high-molecular dispersant, a water-insoluble colorant encapsulated with said high-molecular dispersant, said colorant being at least one colorant..., a water-soluble organic solvent, at least one compound selected from the group consisting of a calcium compound and a magnesium compound, an aluminum compound, and water, wherein said high-molecular dispersant is a block copolymer comprising at least one hydrophobic block and at least one hydrophilic block, and said at least one hydrophobic block and at least one hydrophilic block

have been obtained by polymerizing vinyl ethers as monomers, respectively, and a content of said aluminum compound in said ink is from 1:300 to 1:20 in terms of a molar ratio of said aluminum compound to said high-molecular dispersant” as required by claim 1. As such, claim 1 is patentable for at least the above reasons. Claims 6-16, which depend from claim 1, are patentable for at least the same reasons discussed above in regards to claim 1 as well as on their own merits.

In view of the above, Applicant respectfully requests the rejections under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the claims in connection with the present application is earnestly solicited.

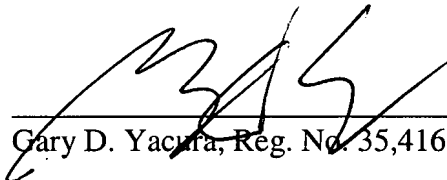
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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